

1 don't we have this witness testify first so
2 she is not held outside of work? Does the
3 Board have any objection?

4 MR. FERNANDEZ: I have no objection.

5 MR. WOLFER: No.

6 MR. TUCK: All right. What we're going
7 to ask you to do -- do you know why you're
8 here to testify? You're not sure?

9 MS. HOBBS: I think it has something to
10 do with the claim that was filed with
11 Progressive.

12 MR. TUCK: What kind of claim, an
13 insurance claim?

14 MS. SIMMONS: The consumer listed her
15 as a witness.

16 MR. TUCK: Right.

17 MR. KODSY: If I may? She test drove
18 the vehicle, so she is aware of the
19 condition of the vehicle. She is aware of
20 my complaint to the Board today of how the
21 vehicle was performing.

22 MR. TUCK: Was there any written report
23 made of her test --

24 MR. KODSY: There was --

25 MR. TUCK: Is it part of our

1 documentation?

2 MR. KODSY: There is a part of it, yes,
3 from the insurance company stating that this
4 problem was due to a Progressive defect, not
5 an accidental one.

6 MR. TUCK: All right. What I would
7 like to ask you to do is frame questions to
8 the witness that will elicit the kind of
9 information that you want us to hear.

10 MR. KODSY: Do you want me to go ahead?

11 MR. TUCK: Yes.

12 MR. KODSY: When you test drove the
13 vehicle, did it feel normal to you from your
14 prior experience of driving a Hummer H2 that
15 that was normal for the way the vehicle
16 performed?

17 MS. HOBBS: When you brought the car in
18 to our service center for the claim -- I've
19 driven Hummers a couple of times, I'm by no
20 means an expert on them. I did feel some
21 type of vibration when we were driving the
22 vehicle; however, I couldn't tell you what
23 it is.

24 MR. WOLFER: Excuse me. Can you just
25 give us a little bit of background about

1 yourself?

2 MS. HOBBS: Sure. I am a claims
3 manager for Progressive Insurance. That's
4 the company that Mr. Kodsy has his Hummer
5 insured with. He filed a claim with us and
6 I manage the service center where customers
7 bring their vehicles for repairs or
8 estimates.

9 MR. TUCK: What was the nature of the
10 claim?

11 MS. HOBBS: The nature of the claim was
12 unknown. He filed the claim and said that
13 he had an issue with the vehicle. It came
14 into my service center. I actually took him
15 in. When he came in, I was working up front
16 that day. I asked him what's going on with
17 the vehicle, what is your claim for? He
18 said he has a vibration and he just wanted
19 us to have documentation that he had an
20 issue with it. After discussing it with
21 him, he said he hadn't had an accident or
22 anything like that. So it wasn't any kind
23 of issue that would be something covered
24 under our policy.

25 MR. TUCK: No personal injury claims?

1 MS. HOBBS: No personal injury claim or
2 anything like that, no. So I test drove the
3 vehicle with him because he brought it in.
4 I drove with him down the road and there was
5 vibration. I don't know what it is or
6 isn't, but there was a vibration with the
7 vehicle.

8 MR. TUCK: Okay. Do you have any other
9 questions?

10 MR. KODSY: Sure. You heard the
11 vehicle idling kind of loud from the outside
12 as well when we stood on the outside with
13 the vehicle running. I know that we noticed
14 that the vehicle was idling high and was
15 making a noise.

16 MS. HOBBS: Again, the first time I had
17 seen the vehicle is when he brought it in.
18 So as far as what RPM's or whatever the car
19 is supposed to idle at, I don't know. You
20 could hear it kind of idling and then coming
21 back down more frequent than what I have
22 ever experienced with those vehicles
23 previously.

24 MR. TUCK: How long did you drive it
25 for and under what conditions?

1 MS. HOBBS: I probably drove it for
2 three to five minutes at best from what I
3 recall. I don't remember what the weather
4 conditions were. I drove it up the road
5 where my office is located onto Haverhill
6 Road up maybe like a mile and then back down
7 and back into my parking lot.

8 MR. TUCK: At what speeds?

9 MS. HOBBS: The posted speed limit on
10 my road is 25, on Haverhill it's 45.

11 MR. TUCK: You drove it the posted
12 speeds, of course?

13 MS. HOBBS: I don't recall. I could
14 not tell you that.

15 MR. KODSY: She did.

16 MR. FERNANDEZ: Bernard Fernandez.

17 Ms. Hobbs, did you have any difficulty
18 maintaining control of the vehicle?

19 MS. HOBBS: As in driving it straight
20 down the road?

21 MR. FERNANDEZ: Yes. Did you have any
22 difficulty keeping it in a straight course
23 or when you had to turn, did the vehicle
24 turn correctly?

25 MS. HOBBS: I didn't have any

1 difficulty maintaining it straight or
2 turning it, no, not that I recall.

3 MR. FERNANDEZ: You have driven Hummers
4 before and there was no such vibration?

5 MS. HOBBS: I have driven other Hummers
6 before in the past. I can't say necessarily
7 that none of them had a vibration similar to
8 that. When we were driving the vehicle, I
9 felt like there was a vibration more severe
10 than anything I had experienced before.
11 Like I said, I drive all kinds of different
12 cars everyday so.

13 MR. TUCK: Anything else?

14 MR. KODSY: Yes. The mass air flow
15 sensor on that vehicle, is that normal for
16 it to go out at 5,000 miles and have to be
17 replaced? Do you have any idea?

18 MR. LOPEZ: I think I have an objection
19 to that. She has no way --

20 MR. TUCK: Are you motor vehicle repair
21 person?

22 MS. SIMMONS: Is that a no? She is
23 shaking her head no.

24 MS. HOBBS: No, I am not.

25 MR. KODSY: From experience?

1 MS. SIMMONS: What's the ruling on the
2 objection?

3 MR. TUCK: I'm going to give her a
4 chance to say if she knows about these
5 things and if she doesn't, then she is not
6 qualified to answer it.

7 MS. HOBBS: I wouldn't say that I know
8 about it where I'm an expert on it to say
9 that I know one way or another how long on
10 that particular vehicle that they're
11 supposed to last for.

12 MR. TUCK: Okay. But we do have some
13 technical experts here that you will get an
14 opportunity to question later and clarify
15 that.

16 Any other questions for the witness?

17 MR. KODSY: No.

18 MR. TUCK: Any questions?

19 MR. LOPEZ: Mr. Lopez to Ms. Hobbs, did
20 I say it right?

21 MS. HOBBS: Yes, you did.

22 MR. LOPEZ: H-O-B-E-S?

23 MS. HOBBS: H-O-B-B-S.

24 MR. LOPEZ: Thank you.

25 Ms. Hobbs, so you work for Progressive,

1 that's an insurance company, correct?

2 MS. HOBBS: Yes, that's correct.

3 MR. LOPEZ: You stated to the Board
4 that you didn't have any difficulty in
5 driving the vehicle, correct?

6 MS. HOBBS: In driving it straight down
7 the road or turning it, no, I did not.

8 MR. LOPEZ: Turning it, did you have
9 any problem with it?

10 MS. HOBBS: No, I did not.

11 MR. LOPEZ: Okay. Did you feel any
12 hopping of the vehicle or any like, it would
13 bounce like that or make noises or --

14 MS. HOBBS: As far as hopping of the
15 vehicle, I wouldn't be able to say yes or no
16 on that. There was a vibration going down
17 the road where you could visually see the
18 steering wheel doing this.

19 MR. LOPEZ: Do you see Hummers often at
20 your insurance company?

21 MS. HOBBS: I couldn't tell you how
22 often I see them. Have I seen them over the
23 course of five years? Yes. How many? I
24 couldn't tell you that.

25 MR. LOPEZ: Did you see more or less

1 two, three, ten, in five years?

2 MS. HOBBS: I probably would say more,
3 20 to 30.

4 MR. LOPEZ: With accidents?

5 MS. HOBBS: With accidents, correct.

6 MR. LOPEZ: And you drive each one of
7 them every time they come in?

8 MS. HOBBS: Not every car every time
9 they come in, no.

10 MR. LOPEZ: So this was kind of a
11 special request by Mr. Kodsy requested from
12 you, correct?

13 MS. HOBBS: I don't know if special
14 request would be the right to say it. He
15 came in and presented the claim to the
16 insurance company that I work for. So it is
17 our duty to see if there is any kind of
18 damage that currently exists on the vehicle
19 that we need to inspect if there is any kind
20 of damage to the vehicle that would be a
21 covered loss. So that's what I was doing
22 was ruling that out.

23 MR. LOPEZ: So basically there was no
24 damage to the vehicle?

25 MS. HOBBS: There was no damage that

1 would be covered under our policy, no.

2 MR. TUCK: Was there damage that was
3 excluded under your policy?

4 MS. HOBBS: Well, we don't cover any
5 kind of wear and tear under the policy.
6 Whatever the vibration, I couldn't say what
7 it is or isn't. We don't cover that under
8 our policy. We just cover comprehensive or
9 collision losses.

10 MR. TUCK: Did you notice any cosmetic
11 defects or damage?

12* MS. HOBBS: No, I did not see any.

13 MR. LOPEZ: Are you aware that the
14 Hummer, the H2, looks similar on the outside
15 but has different powertrains? Are you
16 aware of that?

17 MS. HOBBS: Of the different
18 powertrains on the vehicles?

19 MR. LOPEZ: Yes.

20 MS. HOBBS: I'm aware that there are
21 different ones, yes.

22 MR. LOPEZ: Okay. Thank you.

23 MR. TUCK: Do you have any questions
24 regarding the answers that she just gave to
25 these questions?

1 MR. KODSY: No.

2 MR. TUCK: Okay. Does anybody object
3 to this witness being excused with our
4 thanks?

5 MR. LOPEZ: She may be excused. I know
6 she has to work.

7 MR. TUCK: Are you ready to release the
8 witness?

9 MR. KODSY: Sure.

10 MR. TUCK: Thank you for your
11 cooperation and participation..

12 MS. HOBBS: Not a problem, thank you.

13 (Thereupon, Hillary Hobbs was excused
14 from the hearing.)

15 MR. TUCK: The record will reflect that
16 this witness is leaving the hearing.

17 Now we're going to ask you starting at
18 the beginning to explain your concerns as
19 they arose. We're going to start with the
20 rough vibration and idle.

21 MR. KODSY: Okay.

22 MS. SIMMONS: Excuse me, Mr. Tuck. If
23 we could do similar to what we just did
24 earlier, address by issues?

25 MR. TUCK: That's what I said.

1 Starting with the rough idle, when did
2 you first observe it, describe the condition
3 to us and then refer us -- hopefully you've
4 got your repair orders in order.

5 MR. KODSY: Can I speak?

6 MR. TUCK: Yes.

7 MR. KODSY: Basically what happened is
8 the vehicle -- it was giving me a difficulty
9 of steady ride. So I took it in for
10 service. That was the first time I took it
11 in for service.

12 MR. TUCK: When was that?

13 MR. KODSY: The first date of service
14 here was 10-20, it looks the earliest time
15 this vehicle was serviced.

16 MR. TUCK: Of 2008?

17 MR. KODSY: Of 2008.

18 MR. TUCK: All right. That would be
19 our number eight.

20 MR. KODSY: The service department
21 confirmed or rather discovered that the mass
22 air flow sensor was the problem and went
23 ahead to replace it. Ever since that air
24 mass flow sensor was replaced, this vehicle
25 never ran like it did originally. I've had

1 constant problems with the vibration and the
2 irregular idle on that vehicle.

3 MR. TUCK: So how long had you had it,
4 it looks like you had put about 5200 miles
5 on it?

6 MR. KODSY: Exactly, which was about in
7 one month's time.

8 MR. TUCK: In the first month it was
9 running fine until --

10 MR. KODSY: It was running I would say,
11 if I had to put it in a scale from one to
12 100, it was running roughly about 85 percent
13 with no problem. The other 15 percent was
14 undetermined.. I had no idea what it is
15 until it got worse and I had to take it in
16 for service.

17 MR. TUCK: Had the engine stalled
18 before you brought it in on October 20th?

19 MR. KODSY: Yes.

20 MR. TUCK: It had actually stalled?

21 MR. KODSY: It had actually stalled.

22 MR. TUCK: Did it stall after they
23 changed the --

24 MR. KODSY: It didn't stall afterwards.

25 MR.. TUCK: Okay.

1 MR. KODSY: But it did have an
2 irregular heartbeat or idle.

3 MR. TUCK: That was not there prior?

4 MR. KODSY: It was not there prior,
5 plus the vibration.

6 MR. TUCK: We'll get to the vibration.
7 So when is the next time that you brought it
8 in for this complaint?

9 MR. KODSY: I believe that the first
10 time I took it out of there and I brought it
11 back the next day, which was --

12 MR. TUCK: The next one we have here is
13 November 5th.

14 MR. KODSY: November 5th, yes, but the
15 first one extended and I guess they put it
16 on the same, but my rental receipts will
17 show that there was two in one work order.

18 MR. TUCK: From October 20th to October
19 23rd?

20 MR. KODSY: Yes. There were two
21 rentals involved because the vehicle was
22 returned and then -- it was returned after
23 the repair as non-satisfactory because still
24 the vibration was existing.

25 MR. TUCK: You had two different kinds

1 of vibration. Is there a difference? It
2 says, "Rough vibration at idle, rough
3 vibration during driving."

4 MR. KODSY: Yes.

5 MR. TUCK: Is that the same condition?

6 MR. KODSY: It's the same, but it gets
7 worse. When you drive it on high RPM's,
8 you're obviously feeling the vehicle put out
9 while it's being choked causing the
10 vibration.

11 MR. TUCK: Is that related to items
12 three and four, "Hopping of vehicle at all
13 speeds and vehicle bounces at road
14 conditions"?

15 MR. KODSY: No, that was later observed
16 and submitted for remedy to the dealership.

17 MR. TUCK: All right. So let's just
18 stay with one and two which is the engine
19 vibrations.

20 MR. KODSY: Okay.

21 MR. TUCK: On the 23rd you brought it
22 back out again?

23 MR. KODSY: I brought it back on the
24 23rd.

25 MR. TUCK: You picked it up on the 23rd

1 according to these. You brought it in on
2 the 20th and you picked it up ready on the
3 23rd.

4 MR. KODSY: Okay.

5 MR. TUCK: The next time after that was
6 November 5th that you brought it back in.

7 MR. KODSY: November 5th, I believe, is
8 when I took it to Schumacher's, right? Is
9 this --

10 MR. TUCK: Coral Cadillac.

11 MR. KODSY: Coral Cadillac did a lot of
12 work to it. They replaced the brakes.

13 MR. TUCK: We're still staying with the
14 rough engine.

15 MR. KODSY: Okay.

16 MR. TUCK: They attributed it to an
17 exhaust vibration.

18 MR. KODSY: Right.

19 MR. TUCK: And they realigned the
20 exhaust system.

21 MS. SIMMONS: Was it taken in for the
22 number one and two complaint, for the rough
23 idle at driving?

24 MR. TUCK: That's what it looks like.
25 Customer states, "Engine runs rough."

1 What kind of tires do you have on the
2 vehicle?

3 MR. KODSY: I have BF Goodrich tires
4 which are supposed to be the best tires out
5 there. \$400 a piece.

6 MR. TUCK: Are they off-road?

7 MR. KODSY: No, they're not off-road.

8 MR. TUCK: Are they knobby?

9 MR. KODSY: I wouldn't say knobby,
10 they've got some meat to them.

11 MR. TUCK: Rough tread?

12 MR. KODSY: It's not rough tread. This
13 is my second Hummer. My first Hummer had
14 the same wheels and tires and it didn't have
15 this problem.

16 MR. TUCK: So after the 12th, was the
17 problem resolved?

18 MR. KODSY: No.

19 MR. TUCK: When was the next time that
20 you brought it back for the rough engine?

21 MR. KODSY: I believe I took it over to
22 Schumacher at that point because I wasn't
23 able to get Coral Cadillac to properly
24 address my concerns with the vibration.

25 MR. TUCK: Well, I see Coral Cadillac

1 again here on November 12th. Customer
2 states, "Engine has constant vibration."

3 MR. KODSY: Okay. There were several
4 attempts to get this resolved.

5 MR. TUCK: It says down below after
6 above repair, "Still had some vibrations,
7 steering wheel and seat compared with light
8 vehicle, had same vibration."

9 MR. KODSY: Right. That was not --
10 there was no other vehicle produced to me to
11 show me that this is actually the way it is.
12 I know better. I had another vehicle prior
13 to that that was exactly the same, that's
14 not normal for that vehicle to do that.

15 MR. TUCK: Same engine and
16 transmission?

17 MR. KODSY: Same engine and
18 transmission. It was six months earlier,
19 same year that I had the other one.

20 MR. TUCK: The way we look at these
21 things is at your particular vehicle that's
22 the subject of the hearing. We can't
23 consider what other similar cars do.

24 MR. KODSY: Right, exactly. It was a
25 6.2 engine, Hummer H2.

1 MR. TUCK: So this indicates that there
2 is still some vibration?

3 MR. KODSY: Right.

4 MS. SIMMONS: This meaning the November
5 12th repair order?

6 MR. TUCK: Yes.

7 MR.. KODSY: So then I took it to
8 Schumacher. Do you see that?

9 MR. TUCK: Let's see. Here it is.
10 This is December 1st through December 3rd.
11 It's our number 23. This only refers to the
12 road, not the engine vibration.

13 MR. KODSY: I have one here, it's dated
14 December 5th, invoice date.

15 MR. TUCK: There is another one at
16 circle 25..

17 MS. SIMMONS: So we're not considering
18 12-1?

19 MR. TUCK: That one is not for this
20 complaint.

21 MR. KODSY: There's one of 12-5 and one
22 of 12-8.

23 MR. TUCK: So we're at the one of 12-5.

24 MR. KODSY: It says --

25 MR. TUCK: It says, "There is an engine

1 vibration felt through the truck -- at idle
2 there is a vibration." Is this the one that
3 you're attributing to the engine or the one
4 you're attributing to driving conditions on
5 the road?

6 MR. KODSY: That's the engine.

7 MR. TUCK: This is the engine here?

8 MR. KODSY: At idle.

9 MR. TUCK: Okay. What was done there?

10 MR. KODSY: It goes down at the bottom
11 -- well, what he did was he replaced three
12 new tires on that truck.

13 MR. TUCK: Not on this occasion.

14 MR. KODSY: Not this one, the next one?

15 MR. TUCK: Yes.

16 MR. KODSY: It doesn't look like he did
17 anything. He said there is still a hop as
18 driving --

19 MR. TUCK: We're not talking about the
20 hop, we're still on the engine vibration,
21 the idle vibration.

22 MR. KODSY: I don't think he did
23 anything about that. I have to go back to
24 that.

25 MS. SIMMONS: You can testify later on.

1 MR. KODSY: That was an inspection,
2 bulleted. I don't think he repaired
3 anything for that instance.

4 MR. TUCK: So did you take it in again?

5 MR. KODSY: I took it back on the 8th.

6 MS. SIMMONS: December?

7 MR. KODSY: That's when I believe he
8 did the tires.

9 MR. WOLFER: Of what month?

10 MR. KODSY: December.

11 MR. TUCK: We don't have a repair order
12 for that. We have one for December 5th.

13 MR. KODSY: Let me make sure.

14 MR. WOLFER: December 1st is the tire
15 -- we're trying to handle the vibration from
16 the engine.

17 MR. KODSY: December 1st, yes, that's
18 the one he replaced the tires on.

19 MR. TUCK: So that doesn't have
20 anything to do with the rough engine idle?

21 MR. KODSY: This one is for the
22 hopping.

23 MR. TUCK: We didn't get there yet.
24 We'll come back to that.

25 MR. KODSY: It says road-tested tire

1 vibration.

2 MR. TUCK: No, we're looking for engine
3 vibration.

4 MR. WOLFER: Go to December 22nd,
5 Complaint's C. Customer states, "Engine
6 idle rough."

7 MR. KODSY: And he did something else
8 for it. He inspected and regapped the spark
9 plugs on that vehicle to make sure that
10 that's not the problem. He found no problem
11 there.

12 MR. WOLFER: It doesn't state that.

13 MR. TUCK: It just says, "Engine
14 exhibits normal idle quality for 6.2 liter."
15 Not on this repair, at least it's not
16 listed.

17 MR. KODSY: Well, he did check the gap
18 on that. He did regap the spark plugs.

19 MR. TUCK: That was the last time that
20 you brought it to anybody?

21 MR. KODSY: To Schumacher, yes.

22 MR. TUCK: For that complaint, okay.

23 Let's go back and go over the next one.

24 "Rough vibration during driving." Is that
25 related to the hopping?

1 MR. KODSY: Yes, that would cause the
2 hopping.

3 MR. TUCK: And the bouncing?

4 MR. KODSY: And the bouncing.

5 MR. TUCK: When did you first notice
6 that?

7 MR. KODSY: I noticed that prior,
8 sooner to the mass air flow sensor going
9 out, but I didn't think nothing of it. I
10 figured well, the truck is new, it's stiff,
11 it's going to loosen up as I drive it. I
12 did drive it and there was no change.

13 MR. TUCK: Did it get any worse?

14 MR. KODSY: It's a little worse because
15 you have a higher RPM in the vehicle. After
16 the air flow sensor was replaced, it wasn't
17 completely tuned to where it's supposed to
18 be, so I was getting more activity out of
19 the truck that wasn't present before.

20 MR. TUCK: So the next time you brought
21 in for the driving complaints or concerns
22 was --

23 MS. SIMMONS: Did this hopping issue
24 get addressed?

25 MR. TUCK: I'm looking for the next

1 repair order, hoping the consumer can point
2 it out to me.

3 MR. KODSY: For which --

4 MR. TUCK: For the complaint, the noise
5 vibrations while driving.

6 MR. KODSY: There's a couple of these
7 work orders that actually address two or
8 three items.

9 MR. TUCK: Right, I want to go back and
10 find those starting from the beginning.

11 MR. KODSY: The beginning would be --
12 well, the mass air flow sensor was one.

13 MR. TUCK: Right. When did you first
14 bring it in after that?

15 MR. KODSY: Once I --

16 MR. TUCK: The driving concerns, the
17 hopping or the road vibration.

18 MR. KODSY: Right. That was within --
19 actually that was within a week because I
20 was without my truck for so long I just had
21 to do what I had to do. I believe it's this
22 one here. Is it November 12th?

23 MR. TUCK: We have one that begins
24 November 5th and ends November 12th.

25 MR. KODSY: Okay, that might be one.

1 MR. TUCK: Where on there does it
2 complain about -- here it is. Customer
3 states, "Transmission won't shift." That's
4 not it. We'll get to that one. "Engine
5 runs rough", we did that before where they
6 installed the new exhaust. So I don't see
7 anything here about driving concerns.

8 MR. KODSY: The driving concerns were
9 pretty much being addressed with the actual
10 vibrations and the high idle because that
11 was as a result of the high idle and
12 vibration of the vehicle. The vehicle is
13 more tentative to any road conditions.

14 MR. TUCK: Here is the next one that I
15 see, that would be December 1st of 2008.
16 "Tire vibration, 45 miles per hour and up."
17 That's where they replace the tires. That's
18 our number 23.

19 When they replaced the tires, did they
20 put the same type of tires on or a different
21 type?

22 MR. KODSY: Same exact tires.

23 MR. TUCK: Did it make any difference?

24 MR. KODSY: It did not. They actually
25 left me with one semi-used tire and three

1 brand new tires on the vehicle, which was
2 not acceptable, but I had nothing to say
3 about that at the time. That's the way they
4 let me go.

5 MR. TUCK: Then it says they did a
6 force test on the tires. You said that when
7 you drove it out there was no difference?

8 MR. KODSY: No difference. The service
9 rep indicated that there was no improvement
10 as well to that after he replaced the tires.

11 MR. TUCK: Then we have December 5th,
12 which is 25. It's still a hop driving over
13 25. They say they put on new tires, there's
14 no current for this item. It sounds like
15 they're pretty saying --

16 MR. KODSY: This is all you get.

17 MR. TUCK: Operating to specifications
18 at this time. That's on December 22nd.

19 MR. KODSY: But it was severe enough to
20 replace tires.

21 MR. TUCK: Where it says customer
22 states, "Engine runs rough, road-tested for
23 six miles, exhibits normal idle quality for
24 a 6.2 liter engine." I guess at that point
25 you threw up your hands and said you're

1 coming here.

2 MR. KODSY: Yeah, there was one more --
3 I don't think I have it in this file. There
4 was the one with the spark plugs. It looks
5 like it's not in here. Just for the record,
6 I will state that they did, in fact, check
7 my spark plugs physically.

8 MR. TUCK: Did they find anything wrong
9 with them?

10 MR. KODSY: They didn't find anything
11 wrong with them.

12 MR. TUCK: Let's go now to the
13 transmission. It says, "Transmission kicks
14 when shifting." When did you first feel
15 that?

16 MR. KODSY: When I bought it that,
17 believe it or not, is somewhat of a
18 characteristic of that vehicle which was not
19 perfected by the manufacturer. I wasn't
20 making that my major complaint here.
21 However, that tranny does slip at various
22 speeds. The service maintenance manager
23 indicated that there is an update for the
24 transmission and they should help. It did
25 help, but it was still present.

1 MR. TUCK: Is it a warming shift or
2 it's just that you're aware of it -- how
3 would you characterize it?

4 MR. KODSY: It's very weird because
5 there is no other vehicle like it. You're
6 driving down the road, you take your foot
7 off the gas, and you go to accelerate again
8 and the vehicle doesn't know which gear
9 you're in until it actually slams into gear.

10 MR. TUCK: It has to rev up a little
11 bit?

12 MR. KODSY: Yes.

13 MR. TUCK: I don't want to put words in
14 your mouth.

15 MR. KODSY: Well, it spins before it
16 connects to the gear. That's why you get a
17 little kick.

18 MR. TUCK: How many times did you bring
19 it in for that concern?

20 MR. KODSY: I was more concerned about
21 the vibrations.

22 MR. TUCK: Here it is, we have November
23 5th. That's our number 14. Transmission
24 control module.

25 MR. KODSY: That's abnormal for a

1 control module to be needed on a new vehicle
2 with 5,000 miles.

3 MR. TUCK: At this point you had 6500.

4 MR. KODSY: 6500 miles.

5 MR. TUCK: Did this make any difference
6 that you noticed?

7 MR. KODSY: It depends on how -- I got
8 used to driving a vehicle like that, but it
9 did make a little bit of a difference, but
10 it was still slipping.

11 MR. TUCK: Did you bring it in again
12 for that?

13 MR. KODSY: No, because we talked about
14 it and I can of agreed with them that my
15 other Hummer did the same thing so.

16 MR. TUCK: Then the last is squealing
17 brakes. How many times did you get it for
18 squealing brakes?

19 MR. KODSY: A couple of times, two
20 times. He actually replaced the brakes.

21 MR. TUCK: Did that solve the
22 squealing?

23 MR. KODSY: No.

24 MR. TUCK: It still squeals?

25 MR. KODSY: It still squeals.

1 MR. TUCK: All the time?

2 MR. KODSY: Well, when it gets hot -- I
3 drive the vehicle 100 miles plus a day and
4 sometimes 200 or 300 miles a day. When that
5 vehicle gets hot, it squeals. It's very
6 embarrassing, driving down the road and just
7 stopping at the light, you know.

8 MR. TUCK: Does it affect your stopping
9 or anything, the steering?

10 MR. KODSY: No, but it's just very
11 uncomfortable.

12 MR. TUCK: Can you hear it with your
13 windows rolled up?

14 MR. KODSY: Yes.

15 MR. TUCK: You can?

16 MR. KODSY: Yes.

17 MR. TUCK: With the radio on?

18 MR. KODSY: That's the thing I did, I
19 kept the radio up.

20 MR. TUCK: And that worked?

21 MR. KODSY: Not so much. It covered
22 the noise, but the vibration was present, so
23 you still get that tired feeling coming out
24 of that truck.

25 MS. SIMMONS: I need dates, Mr. Tuck,

1 for these brakes and things. The consumer
2 put down that he brought it in for the
3 brakes issue on October 20th, 2008.

4 MR.. WOLFER: No, 11-5 is there.

5 MR. TUCK: 11-5, that's our number 13.

6 MR. KODSY: They did two things for the
7 brakes. They cut the rotors first.

8 MR. TUCK: When was that?

9 MR. KODSY: That was on the first
10 visit.

11 MS. SIMMONS: What date are you
12 considering the first visit?

13 MR. TUCK: The first visit would be
14 November 5th?

15 MR. KODSY: Or 10-20, wasn't it?

16 MS. SIMMONS: That's what I'm trying to
17 figure out. Why did you put down 10-20 when
18 I don't see it that day?

19 MR. KODSY: I don't think he wrote it
20 down on this, but he did cut the brakes.
21 Maybe we can ask him on cross-examination as
22 well as to what he did that day for the
23 brakes.

24 MR. WOLFER: There is nothing on 10-20
25 to indicate anything about the brakes.

1 MR. TUCK: Anything else you want to
2 add?

3 MR. KODSY: I did have some independent
4 repair shops look at my truck as well.
5 After all these repairs were done and the
6 manufacturer or rather the dealer service
7 techs over there letting me know that this
8 is normal, there's nothing wrong with the
9 vehicle. I have to take it somewhere else
10 because obviously it's my credibility here
11 that's the issue. I took it to Progressive
12 where she was able to document the vibration
13 and I took it to a couple other service
14 shops. One was the Texaco service shop and
15 --

16 MS. SIMMONS: Page 44 on the consumer
17 side, there is an invoice is what I see from
18 Texaco?

19 MR. KODSY: Yes. Basically he didn't
20 want to get involved, but he did state it's
21 a new vehicle, it's still under warranty,
22 take it back to the dealer. That's
23 basically all he documented, take it back to
24 the dealer for more warranty work.

25 MR. TUCK: Has the car been in an

1 accident?

2 MR. KODSY: No, not by me, but it may
3 have been prior to purchasing it. I suspect
4 a couple of problems with that vehicle,
5 major undercarriage rust. The vehicle just
6 feels like it was in an accident.

7 MR. TUCK: Was there a reference in the
8 documents here somewhere?

9 MS. SIMMONS: There's a medical report
10 of --

11 MR. TUCK: That indicates a side
12 impact.

13 MR. KODSY: That was prior to this
14 purchase. That was one of my other issues
15 is I was during recovery when I bought this
16 truck from a prior accident.

17 MS. SIMMONS: So it was a different
18 2008 Hummer?

19 MR. KODSY: Yes, it was a different
20 2008 Hummer.

21 MR. TUCK: This vehicle, to your
22 knowledge, has never been in an accident?

23 MR. KODSY: No.

24 MR. TUCK: Mr. Fernandez?

25 MR. FERNANDEZ: Yes. Good afternoon,

1 Mr. Kodsy. I'm a little unclear now because
2 now the Better Business Bureau letter says
3 that because an accident was alleged, that's
4 why they couldn't hear the case.

5 Are you saying that you were never in
6 an accident in this vehicle?

7 MR. KODSY: Correct. The Better
8 Business Bureau misunderstood what I said;
9 however, they went ahead and further
10 documented the fact that just because you're
11 complaining of any discomforts, physical
12 discomforts, that they cannot arbitrate.

13 MR. FERNANDEZ: Thank you. So you just
14 clarified that point here. There was never
15 an accident in your vehicle?

16 MR. KODSY: There was never an accident
17 in my vehicle. I was recovering from
18 another --

19 MR. FERNANDEZ: Unrelated.

20 MR. KODSY: -- unrelated to this one
21 and going through all of these back and
22 forth repairs on the new truck.

23 MR. TUCK: If we were to test drive
24 that vehicle today, of all of these
25 complaints, what might we find?

1 MR. KODSY: You're going to find,
2 obviously if you drive it long enough,
3 you're going to find the squealing brakes.
4 You're going to find the missing tranny
5 shifting. You're going to find the miss
6 that there is on idle. You're going to find
7 this vehicle to be not a smooth vehicle on
8 the road.

9 MR. TUCK: At what speeds do we have to
10 drive at to see these things?

11 MR. KODSY: 45 miles.

12 MR. TUCK: That should be sufficient?

13 MR. KODSY: Yes.

14 MR. TUCK: We don't have to get it up
15 over 70 or anything like that?

16 MR. KODSY: The thing is long driving
17 of this vehicle, let's say for a half hour
18 or hour of driving this vehicle on the
19 highway with high RPM's and you've got this
20 vibration, you will feel very tired.

21 MR. WOLFER: If we took the car out, we
22 would have to drive it for half an hour to
23 an hour to feel this problem?

24 MR. KODSY: No, you will feel it right
25 away. It gets worse as you drive for a

1 longer period of time because once that
2 engine starts getting hot -- it was
3 referenced from some other people that I
4 spoke to that it may be carbon deposits in
5 the engine to where it's running like that.

6 You will notice the miss and the
7 vibration right where it sits.

8 MS. SIMMONS: When you say miss, is
9 that the transmission?

10 MR. TUCK: No, that's the engine. When
11 the engine misses, it would be --

12 MR. KODSY: Right.

13 MS. SIMMONS: That's characterized here
14 as what?

15 MR. KODSY: Rough engine idle.

16 MR. TUCK: Anything you want to add?

17 MR. KODSY: No.

18 MR. TUCK: Okay. Questions. I will
19 note, without rushing anybody, that it's ten
20 minutes to three. To the extent that we can
21 move things along without putting anybody at
22 risk of not making their case, I would like
23 to try to move along as best as we can.

24 MR. LOPEZ: Good afternoon, Mr. Kodsy.

25 MR. KODSY: Good afternoon.

1 MR. LOPEZ: Let's go to the first item,
2 the rough idle. You state that, as of
3 today, the Board will find a rough idle in
4 the vehicle that is not acceptable to you?

5 MR. KODSY: Correct.

6 MR. LOPEZ: You were present at the
7 inspection we performed at Schumacher with
8 the persons present here, Mr. Thornton and
9 Mr. --

10 MR. KODSY: I believe that was your
11 request, yes.

12 MR. LOPEZ: You advised us at that time
13 that the vehicle is not being driven, it's
14 being stored in a rental place, correct?

15 MR. KODSY: Two vehicles not being
16 driven for the last 5,000 miles that I put
17 on the rental.

18 MR. TUCK: Why is that?

19 MR. KODSY: I'm tired of driving that
20 truck. It's just giving me migraines. I
21 have many medical issues, I don't need to be
22 driving a truck that's just (makes noise)
23 down the road, making me ill. We went
24 through several steps with the repairs and
25 nothing solved it. I started this process

1 and I parked the truck.

2 MR. TUCK: What did you observe at the
3 prehearing inspection? What did you see
4 happen when these gentlemen went over and
5 looked at the truck?

6 MR. KODSY: Exactly what I'm
7 complaining about. They didn't want to
8 comment on it at the time.

9 MR. TUCK: So nothing was said about it
10 to you?

11 MR. KODSY: No, no. They don't want to
12 admit to the problem.

13 MR. LOPEZ: You refused to do the
14 inspection the first time we asked. Was
15 there any particular reason?

16 MR. KODSY: Sure.

17 MR. LOPEZ: Can you explain more?

18 MR. KODSY: I will explain, yes. There
19 was already a request to produce my vehicle
20 prior to Mr. Gonzalez's involvement with
21 this case. I was in the position to deliver
22 the vehicle to Schumacher where they had a
23 representative from there who claimed to be
24 an engineer.

25 MR. TUCK: Is that what's characterized

1 as the final repair attempt?

2 MR. KODSY: Right, that's what I
3 thought it was.

4 MR. TUCK: All right.

5 MR. KODSY: No, no. It was after that.
6 It was the final repair attempt but after
7 that.

8 MR. TUCK: What was the date of the
9 final repair attempt?

10 MR. KODSY: The 22nd, I think.

11 MR. TUCK: That was the final repair
12 attempt, the 22nd?

13 MR. KODSY: Right. So two weeks later
14 -- I will tell you exactly when it was. It
15 was before I filed this motion.

16 MR. TUCK: I don't know that we need to
17 get too far into that subject to the Board's
18 approval. You ultimately consented to that
19 inspection?

20 MR. KODSY: Another inspection after
21 the final inspection.

22 MR. TUCK: Okay.

23 MR. KODSY: So when Mr. Gonzalez says
24 one, we need to do a prehearing inspection,
25 so you already got your's.

1 MR. TUCK: Okay. We can move on.

2 MR. LOPEZ: You state that the Board
3 asked you if your vehicle has off-road
4 tires. Does your vehicle have off-road
5 tires?

6 MR. KODSY: Excuse me?

7 MR. LOPEZ: Does your vehicle have
8 off-road tires?

9 MR. KODSY: They don't look like
10 off-road tires to me. They look like
11 regular Hummer tires.

12 MR. LOPEZ: Hummer tires. Is this the
13 adventure-type vehicle?

14 MR. KODSY: Is the adventure-type
15 vehicle?

16 MR. LOPEZ: What type of engine does
17 this vehicle have?

18 MR. KODSY: Engine?

19 MR. LOPEZ: Yes, engine.

20 MR. KODSY: 6.2 liter.

21 MR. LOPEZ: Do you know how much
22 horsepower that vehicle has?

23 MR. KODSY: 393 horsepower or something
24 like that.

25 MR. LOPEZ: Regarding the transmission,

1 how many shifting speeds does the
2 transmission have, one, two, three, four,
3 one, two, three, four, and five?

4 MR. KODSY: It's a six-speed.

5 MR. LOPEZ: Okay.

6 MR. TUCK: How many cylinders is it?

7 MR. KODSY: Eight.

8 MR. LOPEZ: This vehicle has the
9 special equipment to climb, correct?

10 MR. KODSY: All Hummers do.

11 MR. LOPEZ: This particular one with
12 the adventure package?

13 MR. KODSY: They all have the same --

14 MR. TUCK: Should we take that as a
15 yes?

16 MR. KODSY: Yes.

17 MR. LOPEZ: You had advised that you
18 drive the vehicle, but also it was being
19 stored. Are you aware that rust can get
20 into the rotors?

21 MR. KODSY: From what, from parking it
22 for a month?

23 MR. LOPEZ: Yes. Are you aware of
24 that?

25 MR. KODSY: Not really.

1 MR. LOPEZ: Okay. You said that the
2 BBB misunderstood what you said on your
3 complaint. But we got two letters, one, the
4 letter of December 15th of 2008 states that
5 you have agreed to have the vehicle be
6 checked by the dealer under the terms of the
7 warranty and that they ask you to file the
8 motor vehicle defect notice at that time; is
9 that correct?

10 MR. KODSY: I believe I've been
11 following the steps as I was advised.

12 MR. LOPEZ: So the motor vehicle defect
13 notice was filed just after the BBB told you
14 about that, correct?

15 MR. KODSY: Yes.

16 MR. LOPEZ: Then there is a letter from
17 the BBB advising that you have some issues
18 because you had a previous accident that
19 advised us on another 2008 Hummer that was
20 turned to its side by another vehicle,
21 correct?

22 MR. KODSY: Incorrect. I never gave
23 them details. I told them that I'm
24 recovering from a car accident, I don't need
25 to be driving this truck like that, it's

1 very uncomfortable. They said --

2 MR. FERNANDEZ: Excuse me. Mr. Lopez,
3 what is the relevance of -- the witness has
4 already stated that --

5 MR. LOPEZ: I was just trying to
6 clarify.

7 MR. FERNANDEZ: He said that it has
8 absolutely nothing to do with this vehicle,
9 he was never involved in an accident with
10 this vehicle.

11 MR. LOPEZ: Okay. You stated to the
12 Board now that in order to feel the rough
13 idle or the condition that you mentioned,
14 that we have to drive the vehicle above 45.
15 However, at the inspection we had, you
16 advised that we didn't have to drive the
17 vehicle. Could you explain more on that?

18 MR. TUCK: If I understood his
19 testimony that he stated earlier, the
20 shaking of the engine and the miss in the
21 engine we could see at rest in the parking
22 lot.

23 MR. LOPEZ: Thank you very much.
24 That's it.

25 MR. TUCK: Do you want to call a

1 witness?

2 MR. LOPEZ: Yes, I would like to have
3 Mr. Thomas Thornton.

4 MR. THORNTON: Yes.

5 MR. LOPEZ: Mr. Thornton, who do you
6 work for?

7 MR. THORNTON: I work for General
8 Motors. I'm the district service manager
9 for geography, we cover Broward County and
10 Delray Beach.

11 MR. LOPEZ: Briefly could you tell me
12 more information of this case, your personal
13 knowledge of this case?

14 MR. THORNTON: My personal knowledge of
15 this case has mostly been through working
16 with the dealership, Joe Bardill at Coral
17 Cadillac. Relative to the case, my first
18 meeting with Mr. Kodsy was the other day at
19 Schumacher.

20 MR. LOPEZ: It was at the prehearing
21 inspection?

22 MR. THORNTON: Yes.

23 MR. LOPEZ: Did you drive the vehicle?

24 MR. THORNTON: I was a passenger in the
25 vehicle.

1 MR. LOPEZ: Did you feel anything
2 abnormal, any rough idle that Mr. Kodsy
3 considers abnormal?

4 MR. THORNTON: No, everything felt
5 completely normal to me.

6 MR. LOPEZ: Did he state something to
7 the effect that it doesn't drive like a
8 luxury vehicle or something like that?

9 MR. THORNTON: He did make statements
10 to that effect. Words to the effect of his
11 expectations that it was a luxury vehicle
12 and should drive differently.

13 MR. LOPEZ: Okay. How do you consider,
14 based on your experience of working with GM
15 vehicles as a district service manager, do
16 you consider this vehicle acceptable or not?

17 MR. THORNTON: Yes, and just a quick
18 note on my experience working specifically
19 with Hummers, I have been involved with the
20 Hummer brand since 2005. I have driven
21 several Hummers of virtually every
22 configuration.. This vehicle drove
23 absolutely normal and was acceptable to me.
24 I thought the vehicle was in great condition
25 and the number of miles on the odometer

1 seemed to me as an as new vehicle.

2 MR. TUCK: At anytime during your
3 examination of the vehicle, did the consumer
4 point out to you his concerns like there it
5 is or do you feel that or do you hear that
6 or see that?

7 MR. THORNTON: Yes, sir, he did.

8 MR. TUCK: Did you see what he was
9 talking about?

10 MR. THORNTON: When he pointed out what
11 he was observing, I understood what he was
12 observing, but it is my opinion that those
13 things he was observing are normal
14 characteristics of this type of vehicle.

15 MR. TUCK: Was there anything radical
16 or extreme or noticeable about the things
17 that he was pointing at?

18 MR. THORNTON: No, sir.

19 MR. TUCK: Anything that would be
20 inconsistent with the car as the miles were
21 out on? In other words, does it deteriorate
22 under 30,000 miles?

23 MR. THORNTON: I think I understand
24 what you're asking. If I may clarify,
25 you're asking did the things that we.

1 observed on the vehicle, were they abnormal
2 for the number of miles on the car?

3 MR. TUCK: Right.

4 MR. THORNTON: No, it seemed absolutely
5 normal to me. In fact, as I kind of eluded
6 to earlier, you could have told me that it
7 was a brand new truck on the lot and other
8 than the number of miles on the odometer
9 indicating otherwise, the truck acted as
10 new.

11 MR. TUCK: Did you have any questions?

12 MR. FERNANDEZ: Just very briefly.
13 Good afternoon, Mr. Thornton. Bernard
14 Fernandez. Those points that Mr. Kodsy
15 brought your attention, he's experienced in
16 driving a Hummer, he's had one before. I've
17 never been in a Hummer in my life. For
18 example, we may have the opportunity later
19 to inspect the vehicle, but would I as
20 someone who has never been in a Hummer,
21 notice what the consumer was pointing out
22 saying hey, what's going on here, this thing
23 is coming apart?

24 MR. THORNTON: You would probably
25 notice a different ride quality than what

1 you're accustomed to if you've never driven
2 a heavy-duty off-road vehicle. The Hummer
3 brand is targeted towards the outdoor
4 enthusiasts, it's an off-road vehicle. It's
5 obviously a street legal vehicle. It's a
6 very heavy, very large, very powerful, very
7 capable truck. The tires on the vehicle are
8 BF Goodrich All Terrain T/A's. They are
9 very heavy, large, aggressive tread pattern
10 tires intended as the name suggests for all
11 terrain. BF Goodrich also makes specific
12 off-road tires for off-road use only.

13 They have several other names of tires
14 that are offered for the light duty truck
15 market. The BF Goodrich all terrain tires
16 that are on this truck are designed for
17 aggressive off-road use. Again, they are
18 street legal. That specific to the tires
19 and for the ride quality, the tires in it of
20 themselves being heavy tires, are going to
21 give a stiffer ride. They are going to be
22 louder. You will probably feel them as you
23 drive.

24 As far as the suspension is concerned
25 as well, bear in mind that the adventure

1 package on this truck is intended to appeal
2 to outdoor enthusiasts, people who are
3 off-road enthusiasts, and the truck is
4 designed to handle hard off-road driving.
5 It is designed for that.

6 If your driving experience has been
7 limited to sedans, for example, this thing
8 is going to drive like a beast. It is a
9 beast. It is a heavy duty vehicle.

10 MR. TUCK: Would that mean that it
11 would have a much stiffer suspension and
12 ride?

13 MR. THORNTON: Yes, sir.

14 MR. WOLFER: The consumer made mention,
15 as far as the engine goes, it seems to rev
16 higher. Is this characteristic of --
17 normally the RPM's of a vehicle are 700,
18 750. Is the V8 going to be higher revving
19 because it's more compression and you need
20 to keep it from stalling?

21 MR. THORNTON: In my observation of the
22 vehicle, this particular vehicle, it was
23 consistent with other vehicles of its kind.
24 I did not look at the tachometer to see what
25 the idle speed was. However, I would say

1 that it seemed to me to be in a normal range
2 in just listening to it. It's typically 600
3 to 850 RPM's at idle.

4 Now, it's also a normal thing for many
5 engines to rev higher during, for example,
6 the air-conditioner compressor cycling is
7 one example of a vehicle that might cause
8 the engine RPM to change at idle. I do not
9 recall if his air-conditioner was turned on
10 at the time that we observed his truck.

11 There's also other things that can
12 occur at idle with the engine that can give
13 the perception of an RPM change. For
14 example, an electric cooling fan may come on
15 or it may turn off to keep the engine
16 temperature regulated. Those things can be
17 perceived by an external listener as a
18 change in engine RPM. I do want to clarify
19 that what I observed was absolutely normal.

20 MR. WOLFER: Is the compressor a
21 cycling compressor, when the evaporated
22 temperature gets low and it cycles?

23 MR. THORNTON: Yes.

24 MR. WOLFER: So it has a fixed
25 expansion to it?

1 MR. THORNTON: I'm not certain about
2 that.

3 MR. TUCK: Any further questions?

4 MR. LOPEZ: Not by me.

5 MR. TUCK: Do you have any questions of
6 this witness?

7 MR. KODSY: I have one question.

8 The 2009 H2 now by the manufacturer
9 does not have the BF Goodrich tires; is that
10 correct?

11 MR. TUCK: I will remind you that we
12 can only consider this tire so what they do
13 with other models, if it's not this one --

14 MR. KODSY: My point was is that they
15 discontinued those tires on that truck for
16 having many complaints.

17 MR. TUCK: Do you want to call any
18 other witnesses?

19 MR. LOPEZ: Yes, I'm going to call Mr.
20 Joe Bardill.

21 MR. TUCK: Sure.

22 MR. LOPEZ: Mr. Bardill, based on the
23 time frame and I'm going to make it quick.
24 I know we have gone through all the repair
25 orders. Could you give us a synopsis of

1 what you have experienced in the case of Mr.
2 Kodsy?

3 MR. BARDILL: I basically -- Sherif
4 protested with Mike Stammet (phonetic), the
5 service advisor, on the second repair order
6 and the second trip in on the ^{SAME DAY} that would
7 be on the November 5th repair order. He was
8 complaining about roughness in the idle,
9 vibration at all speeds, 45 and also highway
10 speed, and the brakes squeal. I did
11 duplicate with him the brakes squeal. I
12 felt -- Sherif kept referring to it as an
13 engine missing. I kept telling him it's not
14 an engine miss. It's just like possibly the
15 engine is not isolated enough from the
16 vehicle or a firing frequency exciting the
17 steering wheel a little bit, a little tingle
18 on the steering wheel. But keep in mind,
19 this was the first '08 Hummer that I had
20 driven and I wasn't thinking about the fact
21 that it has a 6.2 liter in it. The 6.0
22 liter had a much better idle quality than
23 the 6.2. It also had 20 percent less
24 horsepower. So there was a trade off to get
25 the horsepower, you had a little bit of a

1 rougher idle. Once realizing that we had
2 the same idle quality in the 6.2 liter in
3 the Escalade, the Escalade idles exactly the
4 same way. Feeling that, going up on the
5 highway, I said that I didn't feel any kind
6 of abnormal vibration at all. I did feel
7 the transmission. It had an extreme flare
8 on a down shift and I believe we put a valve
9 body in at that time.

10 MR. TUCK: Did that solve the problem?

11 MR. BARDILL: That solved the problem,
12 but we did have to come back and do the
13 reprogram because when they did the valve
14 body, they didn't put the updated program
15 in.

16 MR. TUCK: Did that resolve the
17 problem?

18 MR. BARDILL: Yes.

19 MR. WOLFER: I'm sorry. What is a
20 flare?

21 MR. BARDILL: Basically the engine
22 flared up, the transmission didn't down
23 shift. It was in a down shift type of --

24 MR. WOLFER: So the RPM's went up?

25 MR. BARDILL: The RPM's went up, yes.

1 So we addressed the idle quality at
2 that time, basically trying to isolate the
3 firing frequency from getting in the
4 vehicle, we put a weight on a weight on the
5 exhaust system. It's basically like putting
6 your finger on a guitar string to deaden the
7 sound from a guitar string. It made some
8 improvement.. We had some buzzing coming
9 through the IPC. We relocated the line, but
10 it still had that little vibration in the
11 steering wheel.

12 There was another '08. I went to my
13 shop foreman and I said, "I still feel
14 something here, Brian, feel it." He says,
15 "There is an '08 right next to it." So we
16 sat in that '08 and it had exactly the same
17 vibration.

18 MS. SIMMONS: This was on the 11-5
19 repair date?

20 MR. BARDILL: This is on 11-5. You
21 have 11-5 to 11-12. He left and came back
22 the same day. So it's actually on the 11-12
23 repair order. I'm sorry, the weight was
24 done on 11-5. Then on 11-12 is where we
25 compared it to another vehicle. So we have

1 two things going on at the same time, but
2 two different repair orders.

3 At that time, I contacted Bob Martin,
4 the quality manager for H2, and I spoke to
5 him about it because I still wasn't -- it
6 still hadn't hit me about the 6.2 versus the
7 6.0 liter. He has isolate the engine,
8 disconnect the transmission from the engine
9 and see if we still had the vibration which
10 we did. That was pretty much it. We did
11 that and still had the vibration. Then we
12 compared it with another car and the other
13 car had the same vibration. I called Bob
14 back and that's when he said, "Joe, we've
15 got a 6.2 liter in here and there is a trade
16 off." As soon as he said that, I felt
17 stupid, I felt like I wasted a lot of time.
18 It's the exact same idle quality as in the
19 Escalade, it's the same engine that's in the
20 Escalade and I just never thought about it
21 because it was the first '08 that I was
22 involved with.

23 MR. LOPEZ: How much is the horsepower?

24 MR. BARDILL: 393 horsepower, which is
25 20 percent more than what we had in the six

1 liter.

2 MR. TUCK: Any other questions?

3 MR. LOPEZ: No more questions.

4 MR. TUCK: Do you have any questions of
5 this witness?

6 MR. KODSY: Just one to confirm what
7 Joe what has said. You did isolate the
8 starter as per Bob Martin and the fly wheel
9 bolts and restart the engine to isolate
10 vibration, still has vibration with fly
11 wheel disconnected?

12 MR. BARDILL: Correct.

13 MR. KODSY: Okay. I just wanted to
14 confirm that.

15 MR. WOLFER: Can I just ask one
16 question? The repair order dated December
17 23rd, it says, "Vehicle exhibits some rail
18 snake characteristics." What is that?

19 MR. BARDILL: Rail shake.

20 MR. WOLFER: I'm sorry, rail shake.

21 MR. BARDILL: Rail shake is terminology
22 that we use for the pick-up trucks and just
23 about any of the SUV's, about 45 miles an
24 hour down typical roads like Federal
25 Highway, you get a little bit of vibration

1 in the seat from the chassis. It's pretty
2 much in every truck. There's nothing that
3 can be done for that.

4 MR. WOLFER: Okay.

5 MR. TUCK: Any further witnesses?

6 MR. FERNANDEZ: I just have one quick
7 follow up question also. On your December
8 5th invoice, where at idle there is still
9 vibration felt throughout the truck.

10 MR. BARDILL: Which one was that?

11 MR. TUCK: Schumacher.

12 MR. FERNANDEZ: Okay. Did you know
13 about that?

14 MR. BARDILL: No. What does it say?

15 MR. FERNANDEZ: Schumacher. I'm
16 reading here, "There is still a hope at
17 driving over 25 miles."

18 MR. BARDILL: That's the customer's
19 complaint.

20 MR. FERNANDEZ: Still a hope?

21 MS. SIMMONS: Hop.

22 MR. TUCK: Hop.

23 MR. FERNANDEZ: Oh, okay. I got hope.
24 Okay. Thank you.

25 MR. TUCK: Are you going to testify to

1 anything?

2 MR. LOPEZ: Basically it would be what
3 I have said so I am not --

4 MR. TUCK: If we've heard it, then
5 we've heard it. Do you have anything
6 further before we close out the evidence?

7 MR. KODSY: I may have one more
8 question.

9 MR. TUCK: Okay.

10 MR. KODSY: On the last documentation
11 that we received today in regards to this
12 witness list, we have one rep which is
13 Robert from Schumacher was listed as a
14 witness. He is not present today while we
15 do have invoices here reflecting work that
16 was done by that dealership. Is there any
17 reason for that?

18 MR. LOPEZ: He told me he couldn't be
19 here today. I cannot --

20 MR. KODSY: Because he could have
21 clarified a couple of things.

22 MR. TUCK: Do you have any further
23 documentary evidence or testimony?

24 MR. KODSY: I have one more recent
25 inspection done by Palm Beach Garage, which

1 is right here.

2 MR. TUCK: Is that already in your
3 documentation that we have received?

4 MR. KODSY: It should be. It basically
5 states, I told him --

6 MS. SIMMONS: Mr. Kodsy, can you hold
7 on a second while we find that invoice?

8 MR. KODSY: Sure.

9 MS. SIMMONS: I believe I did see it in
10 the file.

11 MR. LOPEZ: Give me date.

12 MS. SIMMONS: 2-10-09, Palm Beach

13 Garage.

14 MR. LOPEZ: I've got it, yes.

15 MR. KODSY: Basically I requested from
16 Mr. Proper (phonetic), which is the owner of
17 the garage, check the vehicle, I have a
18 vibration, and the engine idle is rough.
19 His conclusion was, after test driving the
20 vehicle, which is short and not trying to be
21 involved in this matter at all, he stated,
22 "Exhaust vibration felt throughout the car."

23 MR. TUCK: Was that before or after?

24 MR. KODSY: No, this is on 2-20-09. So
25 this was two weeks ago.

1 MR. TUCK: After all the treatments
2 were done, okay.

3 MR. KODSY: Exactly.

4 MR. TUCK: Any questions regarding
5 that?

6 MR. LOPEZ: No. Unfortunately, we
7 don't have the person here to cross-examine
8 him.

9 MS. SIMMONS: Was that 2-20?

10 MR. KODSY: Yes.

11 MR. TUCK: All right. We have to
12 decide whether to inspect or test drive the
13 vehicle. If I understood the testimony
14 correctly, we don't need to drive it to see
15 that it's shaking. So I think at the very
16 least we should go out and see if and how
17 much it shakes.

18 Does anybody think we need to drive it?

19 MR. KODSY: I would recommend driving
20 it, get the feel of it.

21 MR. TUCK: We've also talked about the
22 tires. So I think at the very least drive
23 it around the road, he says at 20 or 25
24 miles we'll hear it.

25 MR. KODSY: You have to understand this

1 truck has been sitting --

2 MS. SIMMONS: Mr. Kodsy, one moment.

3 This is an opportunity for the Board to take
4 a vote on that issue.

5 MR. KODSY: Sorry.

6 MS. SIMMONS: So the vote is to test
7 drive?

8 MR. TUCK: I think we need to test
9 drive it briefly. If you agree that that
10 would be sufficient?

11 MR. LOPEZ: I do.

12 MR. TUCK: Do you have proof of
13 insurance here with you?

14 MR. KODSY: Of course..

15 MR. TUCK: May we see it?

16 MR. KODSY: Yes.

17 MR. TUCK: This is Progressive. I'm
18 looking for a VIN number here. It looks
19 like 5GRGN2 something 87811107653.

20 MS. SIMMONS: That's a different number
21 than what's listed on the request for
22 arbitration.

23 MR. KODSY: What's the date on that?

24 MR. WOLFER: This December of '08
25 through June '09.

1 MR. KODSY: That's the one.

2 MS. SIMMONS: The VIN number that I
3 have is 5GRGN23878H107653.

4 MR. WOLFER: That's correct.

5 MS. SIMMONS: It's from Progressive?

6 MR. WOLFER: Yes, from December 27th,
7 '08 through June 27th, '09.

8 MS. SIMMONS: Mr. Wolfer, could you
9 read out the policy number please?

10 MR. WOLFER: 76759112-2.

11 MS. SIMMONS: Thank you.

12 MR. TUCK: All right. The way this
13 works is the vehicle will hold five people?

14 MR. KODSY: Yes.

15 MR. TUCK: Who do you want to go from
16 the manufacturer?

17 MR. THORNTON: I can go.

18 MR. TUCK: We're going to be
19 off-the-record when we go out.

20 MR. KODSY: I just want to mention
21 something if we're still on the record.

22 MR. TUCK: We are.

23 MR. KODSY: The longer you drive this
24 vehicle -- obviously it's been sitting, it
25 has not been driven for about a month.

1 We're going to drive it for half an hour,
2 that's not going to do much.

3 MR. TUCK: We're only driving it for a
4 few minutes.

5 MR. WOLFER: We're not driving it half
6 an hour.

7 MR. KODSY: That's even less. But when
8 you drive it for an hour or so, the
9 mechanisms get hot and it gets rougher.

10 MS. SIMMONS: Mr. Tuck, do you want me
11 to stop the record?

12 MR. TUCK: Yes. When we get back, we
13 will discuss what we all saw. You can point
14 out to us, did you see that, did you hear
15 it, but we can't answer you. We'll talk
16 about it when we get back.

17 (Thereupon, a brief recess was had to
18 test drive the vehicle.)

19 MR. TUCK: It's 3:32. We're back from
20 the test drive. The mileage in and out was
21 --

22 MR. LOPEZ: 11,127, that was the
23 mileage in and the mileage out was 11,138.

24 MR. TUCK: Do you want to start, Mr.
25 Fernandez?

1 MR. FERNANDEZ: Sure. I participated
2 in the drive. I heard the sound of the
3 engine quite louder.. I heard the squeaking
4 brakes intermittent, but more often than
5 not. I don't know if my fellow Board
6 members heard this, but at the end of the
7 drive I was with Mr. Kodsy and we heard
8 momentarily exactly from the rear end,
9 knock, knock, knock, and then it stopped.

10 I believe, like Mr. Thornton said, it
11 is a beast, a beautiful beast, but it is a
12 beast nevertheless.

13 MS. SIMMONS: Mr. Fernandez, where were
14 you seated?

15 MR. FERNANDEZ: I was seated in the
16 right rear passenger.

17 MS. SIMMONS: Okay.

18 MR. WOLFER: I drove the vehicle.
19 Before driving the vehicle, I walked around
20 and I inspected all the tires. I really
21 expected to see hot marks or bounce marks or
22 flat spots on the tires because the consumer
23 really complained that the vehicle hopped
24 all along. I observed all four tires and
25 the one tire that was not replaced looked

1 almost similar to the other three tires. I
2 didn't see any malformation of the tires in
3 any way to indicate any kind of bouncing
4 effect that would then make the tires look
5 flat or anything like that. The tires are
6 off-road type tires and are not smooth type
7 of tires that would give you a nice,
8 comfortable ride.

9 I got in and I started it up. It's a
10 truck, so I don't expect to drive in that
11 vehicle and feel comfortable. Vibration
12 from the steering wheel, I didn't feel any
13 or at most very, very slightly. Again, like
14 I said, the vehicle looks pretty inside and
15 all, but this is a massive type of a truck
16 vehicle. Did I hear engine noise in the
17 vehicle when I hard accelerated? Yes. But
18 the way the vehicle is constructed, there is
19 not super insulation and such to keep the
20 noise from entering the cabin. I really
21 watched the tachometer which at idle never
22 got above 750. It was maybe, very slightly
23 it might fluctuate a little bit, but I
24 couldn't discern any kind of a miss like
25 there was a hesitation where I would see the

1 needle really drop off. Those were my
2 observances of the vehicle.

3 MR. TUCK: I sat in the front passenger
4 seat. We drove on local roads for the miles
5 that we did go at speeds of up to 30, 35
6 miles an hour, mostly around 25 to 30, with
7 frequent stops. The consumer asked us to
8 within gear stop a few times and see if we
9 felt anything different. I did notice that
10 when you're stopped in gear, you feel a -- I
11 would guess it is a surge in the motor, but
12 light enough that would be like a mild
13 vibration. I don't want to incorrectly
14 state it. I think mild vibration when you
15 stop with your foot on the brake. It is a
16 big engine and you can hear it, but not to a
17 point where I felt it was evasive. We
18 didn't have the radio on. We did have the
19 windows closed and the air-conditioner on.

20 MS. SIMMONS: The windows were up?

21 MR. TUCK: Closed, yes.

22 MS. SIMMONS: And the AC was on?

23 MR. TUCK: Yes.

24 MS. SIMMONS: How about the brakes that
25 Mr. Fernandez talked about, did you hear any

1 squeaking?

2 MR. TUCK: I heard a light squeak but
3 it's nothing I haven't heard many times. We
4 had testimony that the brake pads had been
5 redone. So the only time I would be
6 concerned about a squeak like the one I
7 heard would be if it was constant and the
8 brakes had been checked and the brakes might
9 be worn, but these brakes were recently
10 serviced.

11 MS. SIMMONS: The squeak that you
12 heard, was it constant or just once in a
13 while?

14 MR. TUCK: No, just very occasionally
15 when putting your foot on the brake at slow
16 speeds. On rapid deceleration I didn't hear
17 it all. I had my hand on the steering wheel
18 at times, on the dashboard, on the shifter
19 level, and you could feel that the engine
20 was running, but I felt nothing that would
21 make me say oh, there is something wrong
22 here.. As far as the miss, I didn't see it.
23 I missed that if it happened.

24 MS. SIMMONS: Mr. Tuck, I just wanted
25 to clarify. Did you experience the squeak

1 that Mr. Fernandez was talking about during
2 braking?

3 MR. TUCK: No.

4 MS. SIMMONS: I'm sorry, Mr. Wolfer?

5 MR. WOLFER: No, I didn't hear any
6 noise --

7 MS. SIMMONS: Did you hear the brakes
8 squeak?

9 MR. WOLFER: Not from the brakes
10 squeak, I just didn't hear it at all.

11 MR. TUCK: The acceleration was
12 definitely smooth and more than adequately
13 powered. I didn't see any break up upon
14 acceleration or any hesitation.

15 MS. SIMMONS: Thank you.

16 MR. TUCK: I'm going to ask the
17 consumer what were your observations?

18 MR. KODSY: My observation is it's not
19 as bad as it can be because the vehicle has
20 been sitting. However, that particular
21 vehicle as much as it looks like a beast, it
22 is not supposed to drive like a beast. If
23 you drive that truck the way it runs like
24 now claiming it's a beast, then you can only
25 drive it for a limited distance. If you go

1 here to the store and back --

2 MR. TUCK: You'll have a chance to make
3 a closing statement. What we're asking you
4 now is what did you see and hear?

5 MR. KODSY: I felt the vibration.

6 MS. SIMMONS: Where were seated, Mr.
7 Kodsy?

8 MR. KODSY: I was sitting behind the
9 driver's side. I felt the hopping because
10 every bump on the road, whether it was there
11 or not, was being felt inside the truck as
12 it bounced. That type of truck is not
13 supposed to do that. I also felt the
14 vibration in the idle where the truck is
15 idling like a beast and it is not supposed
16 to do that, not for \$60,000.

17 The other thing was the gentleman over
18 here stated that there was no tire wear. I
19 just want to bring it up to your attention
20 that those tires only have 3,000 miles on
21 them. Basically they were replaced, because
22 they had some unevenness to them, by
23 Schumacher. The one low skip at idle when
24 you're -- I felt it, too, it was light. It
25 is light, but it is very annoying when you

1 drive that truck all day and you stop and
2 this and that. That's not normal for any
3 vehicle to do that. That's basically it.

4 MR. TUCK: Manufacturer's observations?

5 MR. THORNTON: This is Tom Thornton
6 with General Motors. I was seated in the
7 second row middle. During the drive, I felt
8 the vehicle drove exactly as it drove
9 earlier in the week when we had the
10 prehearing inspection. All characteristics
11 of the vehicle worked as they were designed.

*BAD
FAITH*

12 MR. TUCK: Thank you.

13 We come now to closing statements. Now
14 is the time for you to put together what you
15 want us to hear in five minutes or less.

16 MR. KODSY: Yes, of course. Thank you
17 for your time for being here today.

18 Basically what I want to say is there
19 were many, many repairs done to this truck.
20 Whether it's better now or it isn't, this
21 truck is no longer new to me. It's been
22 abused by repairs. It's not acceptable.

23 MR. TUCK: Anything else?

24 MR. KODSY: That's it.

25 MR. TUCK: Thank you.

1 MR. LOPEZ: Mr. Lopez of General
2 Motors. Very briefly. We believe that this
3 truck is operating normally as designed. We
4 have been able to corroborate the hearing
5 inspection and tested by Mr. Joe Bardill,
6 sorry. I'm bad with names, I'm sorry. We
7 believe that this vehicle is working as
8 designed and it should not be considered a
9 lemon. The value, use, and safety is not
10 compromised on this vehicle at all.

11 Again, we feel that he's in a situation
12 -- we understand the situation that Mr.
13 Kodsy is in, that he had an accident and he
14 has damage to his cervical spine and it
15 feels so bad, but this is a truck and this
16 is how it rides. You cannot correct
17 anything when there is no problem. Again, I
18 would say it is the nature of the beast.
19 Thank you very much.

20 MR. TUCK: Thank you.

21 We come now to the deliberation phase.
22 As I said earlier, you're free to remain
23 here while we speak, but you're not free to
24 participate unless we have a particular
25 questions for somebody. In keeping with Ms.

1 Simmons' preference for analytical thinking,
2 we're going to go through the complaints in
3 the order that they are here.

4 Rough idle, rough vibration at idle,
5 and rough vibration during driving, hopping
6 of vehicle and bouncing of vehicle. I think
7 we can categorize those as one operational
8 issue.

9 MS. SIMMONS: One through four?

10 MR. TUCK: Yes. What does the Board
11 think, unless you want to split them up
12 between engine idle and operation and
13 driving? We can do that.

14 MR. WOLFER: Yes.

15 MR. TUCK: So we're going to start out
16 with just the vibration in the engine.

17 MS. SIMMONS: That would be what, one
18 and two?

19 MR. TUCK: That's number one. Two is
20 vibration during driving.

21 MS. SIMMONS: So we're just dealing now
22 with vibration?

23 MR. TUCK: Right. I know we talked
24 earlier about consolidating the different
25 ones, but as the testimony evolved, it

1 became clear that there was one problem with
2 the engine at idle and engine vibration and
3 the other problem with vibration of the
4 vehicle.

5 MS. SIMMONS: Which is two, three, and
6 four?

7 MR. TUCK: Yes.

8 MS. SIMMONS: Thank you for clarifying
9 that.

10 MR. TUCK: Vibration at idle. Why
11 don't we start with our technician.

12 MR. WOLFER: Okay. Originally, there
13 must have been some kind of problem because
14 the mass air flow sensor failed and, of
15 course, that would cause the engine to
16 vibrate. I just find that -- I don't want
17 to say this vehicle is a beast. The vehicle
18 is a truck. In getting into this vehicle, I
19 really felt that I was going to really feel
20 a vibration, something really is going to
21 knock my socks off. I found that this
22 vehicle idles beautifully. If there was a
23 problem with the idle, I feel that it's been
24 repaired and there is absolutely no problem
25 with the idle.

1 MS. SIMMONS: Before we move on from
2 Mr. Wolfer, did you believe at the time
3 originally when it existed, do you believe
4 that was substantial to use, safety, or
5 value?

6 MR. WOLFER: It would have to be for
7 use because the vehicle wouldn't stay
8 running, but it was corrected.

9 MS. SIMMONS: So you believe it was
10 substantial but it was corrected?

11 MR. WOLFER: Correct.

12 MR. TUCK: At the time of the air mass

13 --

14 MR. WOLFER: At the time that they
15 changed the mass air flow sensor.

16 MS. SIMMONS: Thank you.

17 MR. TUCK: Mr. Fernandez?

18 MR. FERNANDEZ: I agree with my
19 co-member. The rough idle, the rough
20 vibration at idle, I did not feel it was
21 substantial. I did not feel that it
22 impacted the use, value, or safety.

23 MS. SIMMONS: You don't feel that it
24 impacts it now or did you believe, like Mr.
25 Wolfer, it was a substantial --

1 MR. FERNANDEZ: It was a substantial
2 impairment of --

3 MR. TUCK: Of use?

4 MR. FERNANDEZ: Of use and value of the
5 vehicle that no longer exists.

6 MS. SIMMONS: Do you also believe that
7 it was repaired at the time that the mass
8 air flow was replaced?

9 MR. FERNANDEZ: Yes.

10 MS. SIMMONS: Thank you. Mr. Tuck?

11 MR. TUCK: I concur also on all three
12 issues.

13 MS. SIMMONS: Thank you.

14 MR. TUCK: Moving now to the vibration.

15 Two, three, and four. Mr. Wolfer?

16 MR. WOLFER: Yes. I think we can link
17 all of these together on two, three, and
18 four.

19 MS. SIMMONS: What would you call them
20 as a tech because I need to name them
21 something?

22 MR. WOLFER: I think driving vibration.

23 MS. SIMMONS: Okay.

24 MR. TUCK: Now it's difficult to sort
25 out --

1 MR. WOLFER: Right. I inspected all
2 four tires. In fact, the consumer even
3 pointed out that the right rear tire was the
4 one that was not replaced. So I paid
5 particular attention to that making the
6 assumption that there should be some kind of
7 distortion of the tire, which I didn't find.

8 X I drove the vehicle and I know that
9 this is just part of the conditions.

10 Evidently, there were some minor adjustments
11 made, that being relocating a hose, which
12 seemed to transmit some kind of vibration. X

13 Also, doing something to the exhaust system
14 in order to stop some kind of a vibration
15 that's coming through when the vehicle was
16 being driven. I don't get the feeling that
17 there is something there. I don't know if

18 there was anything there. I don't know if

19 the tires were replaced to placate the
20 customer. I just don't know, but I get into
21 this vehicle and I drive this vehicle. In
22 my opinion, the vehicle drives nicely.

23 MR. TUCK: But would you say operating
24 as designed?

25 MR. WOLFER: I would think it's

1 operating as designed because I would not
2 get into a big vehicle like this and expect
3 to have a cushioney drive as if I got into a
4 Cadillac and drove that down the road. I
5 mean, they're two entirely different
6 vehicles. This vehicle is not made so that
7 you don't feel a bump in the road, that it's
8 supposed to be nice and smooth. It's just
9 not.

10 MS. SIMMONS: But you realize not
11 operating as designed doesn't necessarily
12 mean it's not a lemon if that, in fact, it
13 is a substantial non-conforming --

14 MR. WOLFER: Correct.

15 MR. TUCK: It could have a bad design.

16 MS. SIMMONS: Yes.

17 MR. WOLFER: No, no.

18 MS. SIMMONS: Do you feel that, not
19 only based on your test drive, but based on
20 your documents and testimony, do you feel as
21 to this driving vibration that there is a
22 non-conformity?

23 MR. WOLFER: No, I don't feel that
24 there is any non-conformity for that.

25 MR. FERNANDEZ: As to points one, two,

1 three, and four, I also agree, I do not feel
2 that they are not non-conformities. They're
3 conformities. That's how the vehicle, in my
4 opinion, is designed to operate.

5 MS. SIMMONS: Do you believe that the
6 way that's designed, does it substantially
7 affect its use, value, or safety?

8 MR. FERNANDEZ: No.

9 MS. SIMMONS: Mr. Tuck?

10 MR. TUCK: When we were driving down
11 the street there, the consumer pointed out
12 that you could feel the bumps on the road.
13 He is absolutely right. When you over a
14 bump you feel it, even the smaller bumps.

15 In looking at the aggressive tread of
16 the tires and how large and hard they are
17 and hearing the testimony earlier from the
18 technicians that the truck was designed for
19 both on and off-road use, it was designed to
20 maintain contact with the road or the
21 ground. So it wouldn't have this soft feel
22 that you would expect in a car. I know the
23 consumer felt that for that kind of money,
24 you should have a softer drive. I would
25 respectfully suggest for that kind of money

1 it should have been test-driven before
2 spending that kind of money. This is all
3 you can expect in it. It's been that way
4 since the very beginning and that's the way
5 it was designed. From what I saw -- and I
6 fully respect the consumer's opinion and his
7 frankness in his testimony.

8 MR. KODSY: It's not an opinion, sir.

9 MR. TUCK: Well, his statement in his
10 testimony.

11 MR. KODSY: I --

12 MR. TUCK: You're not permitted to
13 interrupt, I'm sorry.

14 MR. KODSY: Yes.

15 MR. TUCK: What I saw here is the way
16 the truck was supposed to be and it seems
17 like it was doing just what it was supposed
18 to be and it's not a non-conformity on those
19 issues.

20 MS. SIMMONS: Do you believe that when
21 it was doing what it was supposed to be
22 doing that you don't -- do you believe that
23 that was a substantial impairment in the
24 safety, use, or value?

25 MR. TUCK: No.

1 MS. SIMMONS: So you don't find a
2 non-conformity?

3 MR. TUCK: No, I don't.

4 The transmissions kicks.

5 MR. WOLFER: Yes. I find that at the
6 time that would be a non-conformity. The
7 dealer had opportunity to repair it. It
8 took them two repair attempts. Evidently,
9 the first time they changed the solenoid,
10 but either they didn't have the software or
11 they had it and they didn't put it in. The
12 vehicle was subsequently brought back and
13 the software was installed, which corrected
14 the transmission shifting. In fact, when I
15 went down the road I really accelerated hard
16 on that and that transmission just kept
17 right on going. I didn't feel any knock
18 into another gear or anything like that, it
19 just went. So I would say there was a
20 non-conformity in the transmission.

21 MS. SIMMONS: For what, use, safety, or
22 value?

23 MR. WOLFER: Use. I'll stick with use,
24 but that the transmission has been repaired
25 and there is no non-conformity at this time.

1 MS. SIMMONS: Was repaired when, Mr.
2 Wolfer?

3 MR. WOLFER: The second repair -- I
4 think the second repair was the 22nd. Is
5 that when they put the software in?

6 MS. SIMMONS: The final repair?

7 MR. TUCK: No..

8 MS. SIMMONS: November 12th, page 18?

9 MR. WOLFER: No, that's when they tried
10 to isolate the vibration and they took
11 things apart. I know I saw a solenoid
12 replaced. Anyone can jump in.

13 MR. BARDILL: November 5th is when they
14 did a reprogramming.

15 MR. TUCK: On November 12th --

16 MR. WOLFER: The 5th through the 12th?

17 MR. TUCK: It's number 20.

18 MR. WOLFER: Right.

19 MS. SIMMONS: So you believe it was
20 repaired on November 12th through November
21 21st repair?

22 MR. WOLFER: Yes.

23 MS. SIMMONS: Thank you, Mr. Wolfer.

24 Mr. Fernandez?

25 MR. FERNANDEZ: As to the transmission,

1 I do find that it's substantial as to both
2 the use and value of the vehicle. I'm glad
3 Mr. Wolfer was the driver and he gave that
4 good summarization. I concur with his
5 impressions that there was nothing there,
6 just very smooth acceleration. I believe
7 that the non-conformity was repaired on the
8 November 12th.

9 MS. SIMMONS: Thank you. Mr. Tuck?

10 MR. TUCK: I certainly believe a
11 transmission that's not functioning properly
12 is a substantial non-conformity as to use,
13 value, and safety, and that it was repaired
14 by the November 12th through 21 repair
15 invoice..

16 Which brings us to --

17 MS. SIMMONS: The squealing brakes.

18 MR. TUCK: Squealing brakes.

19 MR. WOLFER: Okay. I did not hear any
20 noise from the brakes, but the manufacturer
21 stated that and the consumer also told us
22 that this car has been in storage for a
23 while. The rotors can pick up a little bit
24 of rust if the car has been in storage and
25 it's damp down here. Possibly on our road

1 test, my two colleagues did hear a slight
2 squeak, but no squeal. I didn't hear any
3 noise at all. At the time, if there is a
4 brake noise I would say that that would
5 arise to not only value but safety and use.
6 If I heard the noises, I would be afraid,
7 but the dealer addressed it and replaced the
8 pads on 12-23. I believe that cured the
9 squealing noise.

10 MS. SIMMONS: Just to clarify here. Do
11 you believe prior to 12-23, was there a
12 brake issue that was a substantial
13 non-conformity to safety, use, or value?

14 MR. WOLFER: Yes, because previous they
15 addressed the brake issue I think on October
16 10th through 20th. They also did some work
17 on the brake pads at that time.

18 MS. SIMMONS: Okay.

19 MR. WOLFER: But yes --

20 MS. SIMMONS: All three, use, safety,
21 and value?

22 MR. WOLFER: Right.

23 MS. SIMMONS: But you believe it was
24 repaired on the final repair attempt, 12-22?

25 MR. WOLFER: No. 12-22, we're

1 considering that the final?

2 MS. SIMMONS: Well, that's what we
3 stipulated to as the final repair.

4 MR. WOLFER: Then yes, that's it.

5 MR. TUCK: Mr. Fernandez?

6 MR. FERNANDEZ: As to the squealing
7 brakes, I heard them today, so I can't say
8 that they were repaired. It may be as Mr.
9 Wolfer says that there might be some
10 moisture, maybe not. It doesn't rise to --
11 and that's also evidenced by the fact that
12 not everyone heard them. I wouldn't say
13 that the noise is to a point of distraction
14 or to a point where I couldn't drive the
15 vehicle because of the noise. I would find
16 that the problem is still there. I do not
17 believe it is substantial and I do not
18 believe it impacts the use, value, or safety
19 of the car.

20 MS. SIMMONS: How about from a safety
21 point of view, do you believe there was a
22 brake condition that contributed to this
23 squeak noise?

24 MR. FERNANDEZ: There is a brake
25 condition that is contributed to the brake

1 noise that I believe I heard this afternoon.

2 MS. SIMMONS: Do you believe then, if
3 you say there is a brake condition, do you
4 think that perhaps would substantially
5 affect its safety, use, or value?

6 MR. FERNANDEZ: Noise?

7 MS. SIMMONS: A brake condition --
8 you're saying that you felt there was a
9 brake condition that contributed to this
10 noise.

11 MR. FERNANDEZ: If there were a brake
12 condition, it would certainly apply to all
13 three, the safety, use, and value of the
14 vehicle.

15 MS. SIMMONS: Are you saying that there
16 is a brake condition that is a
17 non-conformity to the substantial impairment
18 to use, safety, or value?

19 MR. FERNANDEZ: I do not believe it's a
20 substantial impairment.

21 MS. SIMMONS: Mr. Tuck?

22 MR. TUCK: As evidenced by the repairs
23 that were done to the brake system, to me
24 that makes it evident that there was a
25 substantial non-conformity as to use, value,

1 and safety. Brakes that don't work can
2 variably affect all those issues. It was
3 fixed when they did that last repair on
4 12-22.

5 MS. SIMMONS: Before doing your vote,
6 would the Board count the days and make sure
7 for the ones that you found were
8 non-conformities. In this case, you found
9 to be non-conformities that the vibration at
10 the time it existed was a non-conformity,
11 right, but it was repaired?

12 MR. TUCK: Yes.

13 MS. SIMMONS: Do you believe there were
14 30 days out for that condition?

15 MR. WOLFER: No.

16 MS. SIMMONS: Or any of the conditions
17 that were found today as a non-conformity?

18 MR. TUCK: We agreed earlier I thought,
19 as a stipulation of the parties, that the
20 vehicle was out for 26 days for everything.
21 So I don't know how breaking it up would
22 bring us out of the 30-day limit.

23 MS. SIMMONS: That brings me to my next
24 point then. Is the Board speaking to the
25 30-day presumption or is the Board going to

1 consider 26 is close enough, let's now break
2 it down to the dates? It's the Board's
3 decision.

4 MR. TUCK: I think with the nature of
5 our findings as to the seriousness of the
6 complaints that that shouldn't bring us to
7 where we set aside the 30-day presumption.

8 MS. SIMMONS: Okay. Do the other board
9 members agree?

10 MR. TUCK: I'm going to ask them now.

11 MR. FERNANDEZ: I agree that we should
12 follow the legislative --

13 MR. WOLFER: I agree that it would need
14 to be the 30 days.

15 MS. SIMMONS: I guess a vote is left
16 for you.

17 MR. TUCK: Mr.. Wolfer started all the
18 time, so we will let Mr. Fernandez start.

19 MR. FERNANDEZ: As to?

20 MR. TUCK: Final vote as to the
21 consumer or manufacturer?

22 MR. FERNANDEZ: The manufacturer.

23 MR. WOLFER: I find for the
24 manufacturer.

25 MR. TUCK: I concur.

1 That's going to conclude the hearing.

2 I want to thank you all for your
3 presentations and your patience. Any
4 questions can be addressed to the attorney's
5 office tomorrow. A decision should be
6 rendered within a few days and sent out by
7 mail to everybody.

8 Again, that concludes the hearing. The
9 recorder will continue to run until
10 everybody has left the hearing room, which
11 I'm going to ask you all to do now. Thank
12 you.

13 (Thereupon, the above proceedings were
14 concluded.)

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C E R T I F I C A T E

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I, MICHELLE RUSSELL, do hereby certify
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Dated the 2nd day of April, 2009

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MICHELLE RUSSELL
Stenograph Reporter
March 15, 2013

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WHOLE-BODY-VIBRATION EXPOSURE EXPERIENCED DURING THE OPERATION OF SMALL AND LARGE LOAD-HAUL-DUMP VEHICLES

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Abstract

The body harmlessly attenuates most vibration, however frequencies between 1 and 20 Hz cause the body (pelvis and spine) to resonate (Kitazaki & Griffin, 1998; Thalheimer, 1996) leading eventually to structural damage and health problems including lower-back pain, spinal degeneration, gastro-intestinal track problems, sleep problems, headaches, neck problems, autonomic nervous system dysfunction, hearing loss, and nausea (Scutter et al., 1997; Seidel, 1993; Thalheimer, 1996). Despite the health concerns related to WBV exposure, little attention has been given to understanding the levels of WBV experienced by mining equipment operators. The primary purpose of the present study was to measure WBV exposure levels at the vehicle seat interface and the operator seat interface, during the operation of both small and larger LHD vehicles. Results were compared to the ISO 2631-1 health guidance caution zones to determine safe exposure durations. Preliminary test results indicated that LHD operators were exposed to whole-body vibration levels putting them at risk for injury. ISO 2631-1 exposure guidelines for the health caution zone were exceeded during the operation of several different vehicles. Some seats were also found to amplify the vibration signal resulting in a reduction in the recommended exposure duration.

Key words: Whole-body vibration, ISO 2631-1, LHD vehicle

EXPOSITION AUX VIBRATIONS GLOBALES DU CORPS ÉPROUVÉES PAR LES CONDUCTEURS DE PETITE OU GROSSE CHARGEUSE-DÉCHARGEUSE

Résumé

Même si le corps atténue sans danger la plus grande partie des vibrations, les fréquences qui se situent entre 1 et 20 Hz occasionnent une résonance au corps (bassin et colonne vertébrale) (Kitazaki & Griffin, 1998; Thalheimer, 1996), ce qui peut entraîner des troubles structurels et des problèmes de santé comme : douleur lombaire, dégénérescence rachidienne, troubles gastro-intestinaux, troubles de sommeil, maux de tête, cervicalgie, trouble neurologique, perte de l'ouïe et nausées (Scutter et autres, 1997; Seidel, 1993; Thalheimer, 1996). Malgré les préoccupations pour la santé liées à l'exposition des vibrations globales du corps, très peu d'attention a été portée à la compréhension des vibrations globales du corps éprouvées par les conducteurs de matériel d'exploitation des mines. L'objectif premier de la présente étude visait à mesurer les taux d'exposition aux vibrations globales du corps à l'interface du siège du véhicule et l'interface du siège du conducteur lors de l'opération d'une petite ou grosse chargeuse-déchargeuse. Les résultats ont été comparés aux zones de risques pour la santé afin de déterminer les durées d'exposition sécuritaire. Les résultats de tests préliminaires ont indiqué que les conducteurs de

chargeuse-déchargeuse sont exposés à des taux de vibrations globales du corps risquant d'entraîner des blessures. Les directives de risques pour la santé de l'ISO 2631-1 ont été dépassées lors de l'opération de plusieurs véhicules différents. On a également remarqué que certains sièges amplifiaient le signal de vibrations donnant lieu à une diminution de la durée d'exposition recommandée.

Mots-clés : vibrations globales du corps, ISO 2631-1, chargeuse-déchargeuse

INTRODUCTION

Increased mechanization in mining has resulted in a larger number of workers exposed to longer durations of whole-body vibration, WBV, and the trend towards extended shift lengths (10+ hrs) has resulted in longer durations of exposure. Adverse health outcomes associated with WBV exposure have been well documented and include damage to the nervous, circulatory, and digestive systems. Degenerative changes to the spine are also a concern as they are linked with increased rates of low-back pain and injury (Scutter et al., 1997; Seidel, 1993; Thalheimer, 1996). Research has also shown that health concerns are more likely if the vibration experienced is in the resonance zone which is 4-8 hz for the z-axis and 1-2 hz for the x, y axes (ISO 2631-1). The amount of vibration experienced by an operator of mobile equipment is also determined by driving speed, road condition, vehicle maintenance, vehicle load, vehicle suspension, vehicle size and seat type (Ozkaya et al., 1994; Village et al., 1989; Bush and Hubbard, 2000; Eger et al., 2004).

In a 1989 study by Village, Morrison, and Leong WBV experienced by LHD vehicle operators was measured (11 vehicles, 8 operators, and 4 work locations). The variables of interest were LHD size (3.5 to 8 yard capacities), task (mucking, dumping, driving full, driving empty), and driving speed. Attempts were made to control for operator experience (all experienced), tire pressure, seat suspension (all seats the same), and road conditions (all vehicles driven over the same terrain). The study found that WBV exposure was higher when driving (empty or full) than under all other conditions. The authors also reported higher values of exposure when driving at higher speeds and for smaller capacity LHD vehicles. The present study builds on these results. WBV was measured during the operation of small and large haulage capacity LHDs, while performing three tasks (trucking full, trucking empty and mucking) under similar underground mining terrain. However, WBV exposure levels were measured at the vehicle floor/seatbase interface and the seatpad/operator interface in order to determine the effectiveness of the seat.

METHODOLOGY

WBV Measurement

Whole-body vibration was measured in accordance with the guidelines set out in the 1997 ISO 2631-1 standard. A tri-axial seat-pad accelerometer was used to measure vibration exposure at the seatpad/operator interface and a tri-axial accelerometer mounted with a large magnet was placed on the floor at the base of the seat in order to measure WBV at the vehicle floor/seatbase interface. Measured vibration values were compared to the 1997 ISO 2631-1 Health Guidance Caution Zones (HGCZ) in

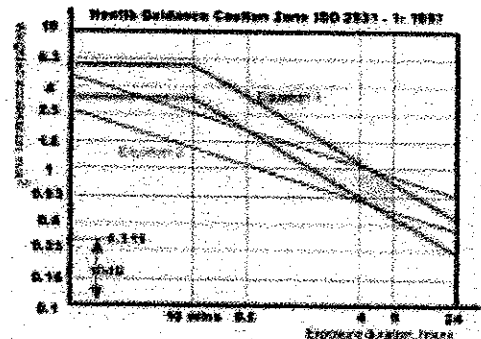


Fig. 1 Health guidance caution zone (ISO 2631-1)

order to determine recommended exposure durations (Fig. 1). No crest factors were measured above 9 therefore frequency weighted RMS acceleration values were used when making comparisons to the HGCZ.

Test Sites and LHD Vehicles

WBV measurements were conducted at 8 underground mine sites in Ontario on 16 different LHD vehicle models. WBV levels were recorded during tramming (loaded and unloaded) and mucking tasks.

RESULTS AND DISCUSSION

Preliminary Results

Preliminary results are shown for two LHD vehicles tested in Table 1. For Model A (10 yard haulage capacity), the highest vibration magnitudes were observed in the z-axis, the seat acted to increase the magnitude of the vibration signal in all axes and the maximum vibration magnitudes fell between 0.89-1.18 m/s/s. The vibration levels experienced fell in the HGCZ indicating harmful health effects are likely. Moreover the seat installed in the vehicle was not appropriate for the vibration experienced in the underground mining environment. For Model B (6 yard haulage capacity), the highest vibration magnitudes were observed in the x-axis, the seat acted to increase the magnitude of the vibration signal, and the maximum vibration magnitudes fell between 0.55-0.64 m/s/s. The vibration levels experienced fell within the zone of caution with respect to health effects and the seat was not appropriate for the vibration experienced in the underground environment.

Control Strategies

Preliminary results from this study support the findings of Village et al., (1989) and Eger et al., (2004). Vibration levels were found to be higher when the vehicles were operated with the buckets empty and WBV exposure measured at the seatpad/operator interface indicated increased health risks for the LHD operators. In order to reduce harmful levels of WBV exposure mining companies were encouraged to maintain equipment (will result in less mechanical vibration), maintain roadways (regular care will act to reduce the peak values in the vibration signal) and operators were encouraged to reduce driving speeds (decreased rate of travel will decrease the magnitude of vibration).

Future Research Directions

Further research is required to evaluate the effectiveness of seating used in underground mining vehicles (for maximum damping, the seat's resonant frequency needs to be smaller than the frequencies produced by the vehicle or amplification of the vibration can occur). In order to tackle this issue the authors of this paper will conduct controlled experiments (reproducing WBV measured in the field) in a laboratory environment in order to evaluate current seat design in an effort to identify seat characteristics required for mining applications.

ACKNOWLEDGEMENTS

Support for this research project has been provided by the Workplace Safety and Insurance Board of Ontario. The research team would also like to thank the Mines and Aggregates Safety and Health Association, the Ontario mining industry and the mining equipment manufacturers for their continued support.

Table 1. Frequency weighted RMS acceleration for the X, Y, and Z axis for two LHD models. Measured crest factors were less than 9 for all measured reported. Recommendations based on the ISO 2631-1 health guidance caution zone are reported.

Machine Model	Haulage Capacity and Activity	Frequency Weighted RMS Acceleration Values (m/s/s)						Recommendation based on ISO-2631-1 HGCZ
		LHD Floor/Seatbase Interface			LHD Seatpad/Operator Interface			
		X-axis	Y-axis	Z-axis	X-axis	Y-axis	Z-axis	
Model A	<ul style="list-style-type: none">10 yard haulage capacityTramming with a fully loaded bucket	0.54	0.43	0.86	0.51	0.61	0.89	Caution with respect to health risks is necessary. Interventions should be put in place.
Model A	<ul style="list-style-type: none">10 yard haulage capacityTramming with an EMPTY bucket	0.51	0.46	0.78	0.57	0.58	1.00	Health effects are likely. Operator should not be exposed to vibration of this magnitude for 8 hour periods. Therefore the duration of exposure should be reduced or vibration magnitude attenuated.
Model A	<ul style="list-style-type: none">10 yard haulage capacityMucking (process to load the bucket)	0.65	0.61	1.47	0.64	0.78	1.18	Health effects are likely. Operators should not be exposed to vibration of this magnitude for 8 hour periods. Therefore the duration of exposure should be reduced or vibration magnitude attenuated
Model B	<ul style="list-style-type: none">6 yard haulage capacityTramming with a fully loaded bucket	0.39	0.24	0.44	0.51	0.30	0.55	Caution with respect to health risks is necessary. Interventions should be put in place.
Model B	<ul style="list-style-type: none">6 yard haulage capacityTramming with an EMPTY bucket	0.81	0.56	1.07	0.59	0.46	0.46	Caution with respect to health risks is necessary. Interventions should be put in place.
Model B	<ul style="list-style-type: none">6 yard haulage capacityMucking (process to load the bucket)	0.41	0.34	0.73	0.64	0.55	0.54	Caution with respect to health risks is necessary. Interventions should be put in place.

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How can you measure vibration?

Are there methods for controlling exposure to vibration?

What are some examples of controlling exposure to vibration?

Are there any Canadian regulations or guidelines for vibration exposure?

What are the standards or guidelines for exposure to hand-arm vibration?

What are the standards or guidelines for exposure to whole-body vibration?

How can you measure vibration?

A complete assessment of exposure to vibration requires the measurement of vibration acceleration in meters per second squared (m/s^2). Vibration exposure direction is also important and is measured in a well-defined directions. Vibration frequencies and duration of exposure are also determined. How hard a person grips a tool affects the amount of vibrational energy entering the hands; therefore, hand-grip force is another important factor in the exposure assessment.

The amount of exposure is determined by measuring acceleration in the units of m/s^2 . Most regulating jurisdictions and standard agencies use acceleration as a measure of vibration exposure for the following reasons:

- Several types of instruments are available for measuring acceleration, the rate of change of velocity in speed or direction per unit time (e.g., per second).
- Measuring acceleration can also give information about velocity and amplitude of vibration.
- The degree of harm is related to the magnitude of acceleration.

Health research data tells us that the degree of harm is related to the magnitude of acceleration.

Instrumentation

A typical vibration measurement system includes a device to sense the vibration (accelerometer), and an instrument to measure the level of vibration. Today a number of industries are making vibration measuring instruments that look like sound level meters. This equipment also has settings for measuring frequency, a frequency-weighting network, and a display such as a meter, printer or recorder.

The accelerometer produces an electrical signal. The size of this signal is proportional to the acceleration applied to it. The frequency-weighting network mimics the human sensitivity to vibration of different frequencies. The use of weighting networks gives a single number as a measure of vibration exposure and is expressed as the frequency-weighted vibration exposure in metres per second squared (m/s^2), units of acceleration.

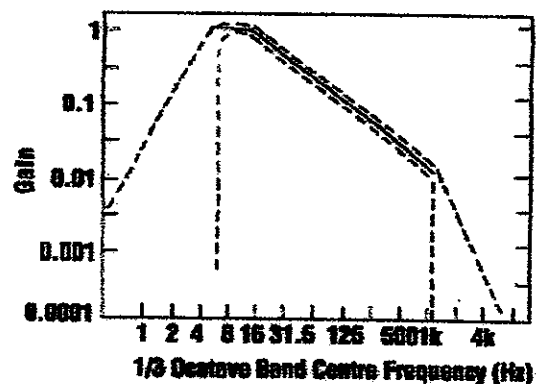


Figure 1

The frequency-weighting network for hand-arm vibration is given in the International Organization for Standardization (ISO) standard ISO 5349. Human hand is not equally sensitive to vibration energy at all frequencies. The sensitivity is the highest around 8-16 Hz (Hertz or cycles per second). Measuring equipment takes this fact into account by using a weighting network. The gain is assigned a value of 1 for vibration frequencies to which the hand-arm system has the highest sensitivity. The dashed lines in Figure 1 represent the filter tolerances in the weighting network.

Are there methods for controlling exposure to vibration?

Protecting workers from the effects of vibration usually requires a combination of appropriate tool selection, the use of appropriate vibration-absorbing materials (in gloves, for example), good work practices, and education programs.

What are some examples of controlling exposure to vibration?

Anti-Vibration Tools

Tools can be designed or mounted in ways that help reduce the vibration level. For example, using anti-vibration chain saws reduces acceleration levels by a factor of about 10. These types of chain saws must be well maintained. Maintenance must include periodic replacement of shock absorbers. Some pneumatic tool companies manufacture anti-vibration tools such as anti-vibration pneumatic chipping hammers, pavement breakers and vibration-damped pneumatic riveting guns.

Anti-Vibration Gloves

Conventional protective gloves (e.g., cotton, leather), commonly used by workers, do not reduce the vibration that is transferred to workers' hands when they are using vibrating tools or equipment. Anti-vibration gloves are made using a layer of viscoelastic material. Actual measurements have shown that such gloves have limited effectiveness in absorbing low-frequency vibration, the major contributor to vibration-related disorders. Therefore, they offer little protection against developing vibration-induced white finger syndrome. However, gloves do provide protection from typical industrial hazards (e.g., cuts, abrasions) and from cold temperatures that, in turn, may reduce the initial sensation of white finger attacks.

Safe Work Practices

Along with using anti-vibration tools and gloves, workers can reduce the risk of hand-arm vibration syndrome (HAVS) by following work practices:

- Employ a minimum hand grip consistent with safe operation of the tool or process.
- Wear sufficient clothing, including gloves, to keep warm.
- Avoid continuous exposure by taking rest periods.
- Rest the tool on the work piece whenever practical.
- Refrain from using faulty tools.
- Maintain properly sharpened cutting tools.
- Consult a doctor at the first sign of vibration disease and ask about the possibility of changing to a job with less exposure.

Employee Education

Training programs are an effective means of heightening the awareness of HAVS in the workplace. Training should include proper use and maintain vibrating tools to avoid unnecessary exposure to vibration. Vibrating machines and equipment often produce loud noise as well. Therefore, training and education in controlling vibration should also address concerns about noise control.

Whole-Body Vibration

The following precautions help to reduce whole-body vibration exposure:

- Limit the time spent by workers on a vibrating surface.
- Mechanically isolate the vibrating source or surface to reduce exposure.
- Ensure that equipment is well maintained to avoid excessive vibration.
- Install vibration damping seats.

The vibration control design is an intricate engineering problem and must be set up by qualified professionals. Many factors specific to the individual work station govern the choice of the vibration isolation material and the machine mounting methods.

Are there any Canadian regulations or guidelines for vibration exposure?

Many Canadian jurisdictions do not have regulations concerning vibration exposure. However, it is prudent to reduce the level of exposure as much as practical since vibration causes ill health effects. It is possible to do this by engineering controls, the use of protective equipment and safe work practices. The design of vibration-damped equipment and engine mountings are the most effective engineering methods of controlling vibration exposure.

In the absence of formal regulations, Canadian agencies often use the Threshold Limit Values (TLVs) and guidelines recommended by the American Conference of Governmental Industrial Hygienists (ACGIH). These TLVs are based on the recommendations of the International Organization for Standardization (ISO).

What are the standards or guidelines for exposure to hand-arm vibration?

The American Conference of Governmental Industrial Hygienists (ACGIH) has developed Threshold Limit Values (TLVs) for vibration exposure from hand-held tools. The exposure limits are given as frequency-weighted acceleration that

represents a single number measure of the vibration exposure level. The frequency-weighting is based on a scheme recommended in the international standard ISO 5349. Vibration-measuring instruments have a frequency-weighting network as an option for vibration measurement. Table 1 lists acceleration levels and exposure durations to which, ACGIH has determined, most workers may be exposed repeatedly without severe damage to fingers. ACGIH advises that these guidelines be applied in conjunction with other protective measures including vibration control.

Table 1 The ACGIH Threshold Limit Values (TLVs) for exposure of the hand to vibration in X, Y, or Z direction*	
Total Daily Exposure Duration (hours)	Maximum value of frequency weighted acceleration (m/s^2) in any direction*
4 to less than 8 hours	4
2 to less than 4 hours	6
1 to less than 2 hours	8
less than 1 hour	12

* Directions of axes in the three-dimensional system

The International Organization for Standardization (ISO) has published a method for measuring vibration and interpreting the resulting data. This 2001 standard (ISO 5349-1) also gives the set of curves shown in Figure 2 that can determine exposure levels likely to cause the first signs of white finger in workers.

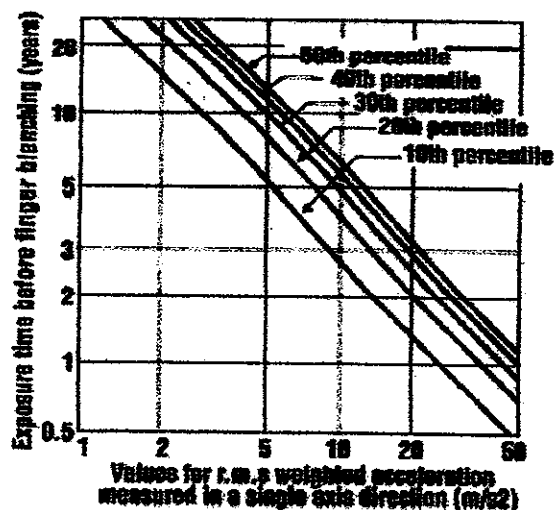


Figure 2 - Curves for exposure times of percentiles of population groups (ISO 5349) to suffer mild effects on tip of finger (see Stage 1, Table 2)

The horizontal axis in Figure 2 represents vibration acceleration. This is measured as RMS (Root Mean Square) weighted acceleration in m/s^2 . RMS is a method of